TRANSCRIPT

Member Discussion

Meeting 23, Session 3
November 17, 2015
Arlington, VA

SESSION 3: MEMBER DISCUSSION

DR. WAGNER: We are assembled. Let's -- our afternoon is committed to discussing some possible recommendations with regard to the education -- ouch -- component. We always put that leg right in front of me, don't we?

And we have some -- and we do have some questions from our Mount Holyoke students, Commissioners. So I think I'd like to -- oh, and from some others. So I think --

DR. GUTMANN: Yeah.

DR. WAGNER: -- I think I'd like to go through these very, very quickly and -- as we make the transition.

This is from Uma Lima and I met Uma a little earlier. Uma, you say, though, don't you?

MS. LIMA: It's Umi.

DR. WAGNER: Umi. I'm sorry. I met you earlier.

And the question is how does testing take into account underprivileged students that don't have resources or proper guidance for test preparation with standardized assignments, especially as science courses become less available -- science courses become less available, and even if science courses may be present, they aren't regulated to ensure that students are being prepared properly?

So this is about having access to science education. How does it take into account students with things like testing anxiety and PTSD and other disabilities that have capability of applying knowledge, but not in a testing environment? So what do we do to accommodate the latter, but account for the former? It seems like issues of social justice, some issues of inequity.

Thoughts that we might include in our report to address those things?

DR. GUTMANN: Well, I think we have a principle of justice and fairness which we interpret as a commitment to distribute fairly the benefits and the costs of any policy -- the products of any policy, and I think in the education area, it applies really strongly because education's a foundation for other opportunities in life. So I think we're going to make it clear in the report that what we recommend for education and deliberation we want distributed widely and that means it needs to have the modifications and the flexibility to be used among, you know, the widest range of students.

DR. WAGNER: Dan?

DR. SULMASY: I was going to say first that we have to be clear that we can't address all inequities in education through introducing bioethics or through our report, but that much being said, the question highlights the tension that we heard between the sort of need to have tests that will reduce questions, that cause anxiety and cause students to have -- who have difficulty to not be able to take the test and show themselves as they truly are -- balanced against what we heard was the need to have questions about these topics in the tests in order to get the schools to teach the topics that are not just going to be for elite schools, but for everybody.

So I think we have to find a balance between those two, but certainly, I think, we came out on suggesting that it is a disservice to eliminate those kinds of questions from the tests because it means that then that doesn't give the incentive to the schools to begin to teach those topics.

DR. FARAHANY: Just one --

DR. WAGNER: Sure, please.

DR. FARAHANY: -- one of the things that our earlier panel talked about a little

bit was some of the ways in which there are attempts to sort of democratize education and access to information. MOOCs are an example of that, the MOOC on bioethics, you know, efforts to bring scientific and basic scientific education to online platforms that make it more accessible, that make the best teachers more accessible to more people. That isn't an end all, be all solution, but it's one step toward access to different kinds of education that wouldn't be as available.

A lot of the education modules that the Bioethics Commission and our staff has been developing are really to bring those tools into the classrooms, to bring them into a much broader group of people to help teachers who wouldn't otherwise be able to put together those educational materials, who wouldn't have the time, who wouldn't have the access to be able to incorporate it into their own classroom settings.

And so I think there's a role for people at places that do have greater means to be able to contribute meaningfully to try to improve access and that's by giving education as a public good in some ways into places like educational modules that we're developing or through MOOCs or things like that. So it's a step in the right direction, I think, to address some of those concerns.

DR. GUTMANN: Let me give you one just specific example --

DR. WAGNER: Sure.

DR. GUTMANN: -- which could be applied to bioethics. It happens to be in the realm of modern poetry. So we created a lot of MOOCs at Penn which are interactive with the professor, but they're online and one of them is a Modern American Poetry MOOC, which Al Filreis teaches. He's a professor at Penn. And it had about 20,000 students. It turns out -- and they're interactive sessions with the professor.

It turns out that one of those students is a severely autistic young man who can't

learn in person because of his autism, but can learn on the computer and he was one of the, you know, successful students. He completed the course and it was transformative for him. So this is just an --

DR. WAGNER: Great example.

DR. GUTMANN: -- it's a great example of how you can reach more populations and this course had people from around the world and it had a senator who took it, Dick Durbin, who commented to me at a -- when I met him that, "I bet you don't know, I took a Penn course," and I said I do. It was Modern American Poetry, but so did this autistic young man take it.

So this a way technology doesn't supersede in person, but it extends the reach of in person.

DR. WAGNER: Thank you.

I'm going to combine the next two questions. One is another student, Lilly Rosenberg. Lilly, raise your hand. Thank you for this one and you'll hear why I'm going to try to combine it, but we also have a teacher, Kaitlyn Hoyt, who I -- and Kaitlyn, are you part of the same group? Are you --

MS. HOYT: No.

DR. WAGNER: I didn't think so. I wasn't sure.

DR. GUTMANN: Welcome. Welcome. Welcome.

DR. WAGNER: Welcome, but they ask interesting questions about opening minds and keeping minds open. In fact, Lilly's observation is about the power of making sure that we have -- we can have the kinds of discussions and teaching experiences that open people's minds and makes the observation that if we could do that around bioethics, maybe we could do it around many more things that people should be

open minded about.

But Kaitlyn asks us -- goes to David's point earlier today, this morning, about concern that there are -- even with open minds, that there are subjects that aren't discussed and things we stay away of -- away from. The question that Kaitlyn poses, as a Commission, we would imagine that there are any subjects in bioethics that we would tread lightly on? Let me read her exact language.

DR. GUTMANN: Yeah. Yeah.

DR. WAGNER: Are there topics related to bioethics that experts -- that's you guys -- might shy away from giving teachers to bring into the classroom because it might in fact offend, shut down, minds --

DR. GUTMANN: Yeah.

DR. WAGNER: -- rather than open and engage them. Is everything fair play? Anita?

DR. ALLEN: Thank you. I think I hear so often from teachers in secondary school and in colleges about how wonderful it is to teach young people because minds are still open --

DR. GUTMANN: Yeah.

DR. ALLEN: -- and one can have a tremendous impact on how young people develop their thinking. It's a grave responsibility as well as a joy.

Are there any topics that are off limits? You know, I think that we don't believe there are any topics which should be off limits in some absolute sense, but I think there are practical constraints and political constraints on what a public body like ours can discuss and I think we have cautiously avoided pursuing some potential topics because of the sense that it would be counterproductive for our Commission to go down that

line.

I personally, you know, have some topics I would like to discuss, but I think are not probably great for this body, but, fortunately, I think there is some place in America for almost any topic to be discussed.

DR. GUTMANN: Yeah. And I think what Anita says translates into the classroom. Well, I don't think there -- and I've taught all the hottest topics in my ethics and public policy class and that was at the university level. It was a private university. I shied away from nothing, and in fact, I went back in history to challenge people on issues that we take for granted -- women's suffrage, slavery -- to basically hone their ethical skills on so what were the arguments against this and how do you counter them and how do you -- you know, I actually made them do exercises of first make the strongest arguments against your position and then for it.

So there was nothing I shied away from there, but in the -- in a public school classroom or even in a private school classroom, if you want to make progress, you have to take into account what you can do that's controversial that's not going to get parents up in arms before you actually make any progress.

So I think there are practical judgment issues in this and since there's so many topics that could hone student skills, why not pick the ones that you're going to be able to make progress on before you get a kind of backlash? So I think that's -- that is the general principle which is nothing is off limits, but use your judgment, good judgment, to pick what you're actually going to succeed educationally on.

DR. WAGNER: Haven't you observed, though, also just as corollary to that, that by picking the right subjects, whenever a class or whenever a conversation, a deliberation is able to address successfully a controversial issue -- and by the way,

successfully doesn't necessarily mean resolved to a single conclusion -- but to the extent that that body has success in dealing with something controversial, it actually opens the agenda and --

DR. GUTMANN: Yes.

DR. WAGNER: -- opens the mind for a higher level of controversy and complexity than --

DR. GUTMANN: So I like --

DR. WAGNER: Yeah.

DR. GUTMANN: -- picking some of the most controversial issues as long as you can do them forward and I think part of the answer is how you set the stage for your teaching and that's where what Christine said about teaching teachers is important.

Whatever you teach, you need to inform students of what the ground rules are and so my ground rules were any opinion is welcome in this class as long as you can give reasons for it and no opinion is going to succeed just because it's popular, either with me or with other students. And, you know, there are certain ground rules and I think people need to know the ground rules and it's a shame that now we're in a realm where the big controversies over trigger warnings because trigger warnings sound I'm like warning you, beware, blah, blah. It's --

DR. WAGNER: I agree.

DR. GUTMANN: -- here's the space that you have in the classroom which you don't have the luxury of having elsewhere, and here is -- here are your rights and here are your responsibilities in that space.

DR. WAGNER: Nita?

DR. GUTMANN: And it --

DR. FARAHANY: I think --

DR. GUTMANN: -- I should say just -- you know, it actually works when you set -- it gives people a comfort, but also a sense of what's welcome is reasoned argument.

DR. FARAHANY: So I wholeheartedly agree with everything you've just said, Amy, I want to give a couple of examples of implementing that as well.

So one is I think starting with topics that can be a win --

DR. WAGNER: Uh-huh.

DR. FARAHANY: -- for a successful dialogue enables people to then have even more difficult and contentious topics. If I were teaching -- and I've gone into high school classes to give, you know, guest talks and lectures. I'm rarely going to start, especially on a onetime visit, talking about things like abortion and physician assisted suicide. So I'm probably not going to talk about the beginning of life or the end of life, not because I don't think that those are important topics to talk about, but because they're already incredibly divisive topics and I don't think it's a good starting place for complex issues in bioethics --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- and to teach important skills and reasoning.

In my own teaching at the university level, one of the most difficult topics to teach in a criminal law class is rape --

DR. GUTMANN: Uh-huh.

DR. FARAHANY: -- and many professors choose not to teach rape, particularly male criminal law professors choose not to teach rape, and this gets into some of the trigger warning --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- kind of thing where the idea is that it's very likely, in fact, I think in every class that I've taught rape, there has been at least one person who has been a victim of sexual assault and to be able to talk about some of the topics that are most sensitive to people and may personally affect them and yet be able to do so in a meaningful and important way because especially in a law school class setting, if you can't talk about murder, rape, you can't really take criminal law. You can't talk -- every single class requires trigger warnings, really, if you're going to go down the road of trigger warnings.

And so to Amy's point, I think setting up the ground rules for the conversation is incredibly important. So, of course, I don't teach rape on day one of criminal law. That would end my criminal law class and it wouldn't go well. By the time we get to rape, it's midway through the semester and there's already been a dynamic set up in the classroom of respectful --

DR. WAGNER: Exactly.

DR. GUTMANN: Yeah.

DR. FARAHANY: -- dialogue where people are able to have conversations.

I cold call in my classes, but on the day -- several days before I teach rape, I explain that the ground rules are going to be a little different that day, that I'm not going to cold call, which is the process of calling on a person and them having to engage in the dialogue instead of take volunteers for those days. And so I set up --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- what the conversation will be like and why it may be different in that particular context and invariably every year, my students find that that's

the best set of classes that they've had, even though it's the most difficult, the most sensitive.

So I think over a sustained period of time, for a class over an entire semester, that there is -- that every topic is a topic that you can engage in so long as you set very clear parameters --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- for how the conversation will proceed and it doesn't -- you don't start at the place of the greatest controversy and if you never get to the place --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- where you have a comfortable classroom dynamic, then you have to really consider --

DR. GUTMANN: Yeah.

DR. FARAHANY: -- whether or not bringing up particular topics makes sense for that class.

DR. GUTMANN: Yeah.

DR. WAGNER: To build trust. Yeah.

Dan? And then we'll move --

DR. SULMASY: Yeah. While I also agree with everyone that nothing's off the table in principle, I also very much agree that starting with the most controversial issues is not the way to go partly -- not only because the controversy might splinter people and shut down minds, but partly because it also sort of is a caricature of ethics, that it only becomes the most controversial, complicated --

DR. GUTMANN: Right. Right.

DR. SULMASY: -- issues. We're going to talk more, I hope --

DR. GUTMANN: Yeah.

DR. SULMASY: -- this afternoon about virtue --

DR. GUTMANN: Right.

DR. SULMASY: -- and education for virtue, and for instance, in medical

ethics --

DR. GUTMANN: Yeah.

DR. SULMASY: -- it's important for a physician in training to know that it's an

ethical issue that physicians on average interrupt a patient who begins to speak within

18 seconds. Right?

DR. GUTMANN: Yeah.

DR. SULMASY: That is an ethical issue to not let the patient's voice be heard --

DR. GUTMANN: Yeah.

DR. SULMASY: -- and simple things like that are part of ethics as well and we

need to emphasize that. So --

DR. GUTMANN: Hear. Hear.

DR. WAGNER: Very good. Well, you mentioned getting into a conversation

about virtue. Let me refer -- I'm going to move our agenda --

DR. GUTMANN: Yeah.

DR. WAGNER: -- forward.

DR. GUTMANN: Yes. We need --

DR. WAGNER: Let me refer to some prepared notes to set that up.

DR. GUTMANN: Yes.

DR. WAGNER: We're talking, of course, at this phase of the day about bioethics

education and like deliberation, bioethics education is a topic that we've discussed at

length at prior meetings and we have numerous recommendations in many of our reports. We've been aided by the insights of experts in the area who've testified and come to give us their views.

In addition, we as Commission have contributed directly to bioethics education and our Commission staff has been especially productive in developing what are now over 50 educational tools related to the topics. These tools include case studies. They include teaching modules on key bioethics topics, classroom discussion guides, webinars, videos, free and available at our website bioethics.gov.

These materials, they are designed for teachers and students of bioethics in a variety of contexts. They include traditional classroom as well as professional settings. In addition to these materials, teachers benefit their students by continuing their own professional development, their own professional training, and support as they seek to implement ethics education and navigate the challenges of conducting discussions of complex bioethical topics in a classroom.

Our discussions have repeatedly emphasized the importance of building a solid foundation for bioethics learning by starting general ethics education early and continuing it in different ways and in different settings throughout life. Ethics education helps to prepare us as members of society for bioethical challenges that we all face in our personal and professional lives and as a society, such as how best to deploy a new medical technology or pharmaceutical, making medical decisions for a loved one or considering what we want for ourselves at the end of life.

We've heard from experts who've emphasized that specialized bioethics education is critical in professional fields such as medicine, bioscience, business, and law, and integrating bioethics into professional training in these and other fields fosters

the skills needed for ethically competent professionals with dual competence in bioethics and their native fields of expertise.

At our most recent meeting we concluded that it is critical to better understand how to measure the effectiveness of such education efforts -- educational efforts -- while acknowledging that some aspects of ethics education such as the development of character and of virtue are, or may, be immeasurable.

So let's consider in this session four possible recommendations in these areas and let me run through them.

First recommendation is recognizing the critical role of schools in preparing citizens to participate in their communities and fostering values and skills that will help them to address inevitable bioethical challenges they will face throughout life. Educators at all levels, our recommendation, from preschool to post-secondary professional school should incorporate into their curricula and courses ethics education tools, such as vivid, real-world case studies aimed at appropriate grade level that focus on building moral character through examining and appropriating moral principle and also focus on ethical reasoning skills. It's upon this foundation that bioethics skill-building will be developed.

Second recommendation, so the first is focused on preschool through post-secondary/professional. Second recommendation -- building on the Bioethics Commission's recommendations in its past report, including our first report on synthetic biology and our most recent report on neuroscience and ethics -- graduate and professional education including in medicine, law, and business should include a strong bioethics component to help graduates understand and address the distinct ethical challenges that might arise in the practice of their chosen profession.

And then the third recommendation education policymakers should support professional development for teachers to prepare them to implement further ethics and bioethics education and facilitate constructive conversations about complex bioethical questions. Since ethics education can benefit all students regardless of age or ability, opportunity to participate in ethics education should be provided equitably and that gets back to an earlier question.

And fourth and finally, at least at this -- for this phase of our conversation, that both the processes and outcomes of bioethics education should be evaluated -- there should be assessment -- evaluated to determine the success of educational programs and curricula in contributing to a more informed and ethically literate public. Educators and others involved in bioethics education should contribute to the development of appropriate metrics for assessing how ethical bioethics education -- effective, excuse me -- bioethics education is in developing related moral reasoning and decision making skills.

Those are the four recommendations, preschool through post-secondary, graduate and professional school education, teacher preparation, and finally, assessment. I think those are our four areas of recommendation.

And with that, I'll open the floor for conversation or comment --

DR. GUTMANN: Well --

DR. WAGNER: -- on those.

DR. GUTMANN: -- I'll just begin with the first, which I support all of them, but the first, I think, is an important addition to our earlier conversations which really focused on controversial issues.

Let me just use Dan's example of physicians interrupting and make it into a

lesson that could start in pre-K, which is the lesson of listening and learning by listening. It's a great example because it may not be pre-K, but by the time students get to elementary school, they can role play being a patient going to their pediatrician and the pediatrician asks them what's -- you know, what are you feeling and they need to respond as to -- and the pediatrician will listen, and the pediatrician will learn from that based on her skills, and it's just -- I think it's really important that we understand that bioethics begins at the very basic level of learning some very basic virtues of character such as listening, responding when asked a relevant question, and learning from that dialogue.

So I just -- when we get to be professors of bioethics, we often deal with the most difficult, complex issues and we teach that to our students at the college level and beyond. I think high school students are also capable of dealing with some of those complex issues, but at the very early stages of education --

DR. WAGNER: Uh-huh. Uh-huh.

DR. GUTMANN: -- we're teaching the foundations not only of ethics generally, but of bioethics in particular.

DR. WAGNER: Amy, you're -- oh, I'm sorry.

Dan, go ahead.

DR. SULMASY: I got a couple of things to say about the first on education. The first comment is I'd sort of like to see us say something about the role of other social institutions besides schools in education. Certainly schools have a, you know, significant role to play, but so do families, so do religious communities, so do civic organizations, and I think that some of those can take -- I think our audience for this report is wide -- and we ought to sort of address the role that those other institutions

play for two reasons. One is Aristotle's observation that to teach ethics to the youth, they must be well brought up, right? So there's a sort of sense there that some of the work, particularly in character development, begins before school and continues outside of school.

And second is from a political perspective a more robust society has institutions besides schools --

DR. GUTMANN: Yes.

DR. SULMASY: -- that carry on some of this education. So I'd like to hear us say a little bit more about that in the report.

And then, second, that the emphasis we seem to have a lot of in education, maybe because of our beginning with deliberation has been on sort of educating students to be good citizens dealing with these sorts of questions, but I think that we need to have -- come to the realization that just to be a good parent, child, sibling, one is going to face the uses of medicine as personal bioethical --

DR. GUTMANN: Yeah. That --

DR. SULMASY: -- questions, right? And --

DR. GUTMANN: -- yes.

DR. SULMASY: -- this is not just sort of, you know, what the policy should be and being able to participate in policy debates nationally or locally, but to think about, you know, questions about what's going to happen when my parents are on a ventilator? What's going to happen, you know, when I'm faced with questions regarding fertility in my own life, that these sorts of -- because medicine is so pervasive in our culture and so powerful, that everybody will face these kinds of questions and I think we really need to have a little bit more emphasis on some of the clinical questions that I think we need to

educate citizens to be aware of and --

DR. WAGNER: May I -- this actually -- your observations, first of all, that we should look at more than just schools and other social institutions that do --

DR. SULMASY: Uh-huh. Uh-huh.

DR. WAGNER: -- shaping of citizens is a good one. It's actually in this particular one that I began thinking about how it is we bridge to our earlier conversation. In fact, in none of these -- I couldn't find in any of these four recommendations any reference to how we would do these things, just that we should do these things, and this is after a first part of the report that's all about how to be deliberative.

DR. SULMASY: Uh-huh.

DR. WAGNER: And I -- part of what sparked this is for another reason. I was going back through some literature. There was a fascinating Nature -- article in Nature over the summer about teaching preschool, actually about deliberation --

DR. GUTMANN: Uh-huh.

DR. SULMASY: Uh-huh.

DR. WAGNER: -- and discovery.

DR. GUTMANN: Yeah.

DR. WAGNER: In fact, it was a wonderful story. It opened up at some German preschool where they posed the question of what causes the wind to blow and the class deliberates for a while and determines it must be the movement of the branches of the trees and how it is those leaves force the wind, and you and I, depending on how -- if we were teaching to the test -- David's gone, but if we were teaching to the test, we'd say, "No, no, that's wrong. Let me explain what it is," but if you were teaching

deliberation you would say, "Well, can you think of any other place where the wind blows that you haven't seen trees?"

DR. SULMASY: Uh-huh. Uh-huh.

DR. WAGNER: And you would've begun a conversation about this.

I am wondering if there is space in at least this earliest one to even challenge thoughts about engaged education and deliberation since that's the theme of our --

DR. SULMASY: Uh-huh.

DR. WAGNER: -- such a theme of our prior recommendations --

DR. SULMASY: Uh-huh. Uh-huh.

DR. WAGNER: -- so I'd like to see if the Commission agrees with making some reference to that in there?

You had a quick one and then I'm going to --

DR. GUTMANN: No.

DR. WAGNER: -- go to Nita --

DR. GUTMANN: I just want to --

DR. WAGNER: -- Anita.

DR. GUTMANN: -- make sure I understand your question, a quick -- so we understand a quick reference to --

DR. WAGNER: A quick reference to -- we don't have any 'how's in here --

DR. GUTMANN: Yeah.

DR. WAGNER: -- and one of the big 'how's that we have just established getting to this point in the report is deliberative -- democratic --

DR. GUTMANN: I got it. I got it. Yeah.

DR. WAGNER: -- deliberation and I was encouraged -- I thought maybe the

reason it was out of here, we say, well, preschoolers can't really deliberate about these issues. You bring up later life, older students who will want to know how to deliberate about certain issues, but I was encouraged by this little Nature story that --

DR. GUTMANN: Yeah.

DR. WAGNER: -- there are creative ways --

DR. GUTMANN: Yeah.

DR. WAGNER: -- to encourage deliberation --

DR. GUTMANN: So --

DR. WAGNER: -- at the earliest stages. So I wouldn't leave it out of here --

DR. GUTMANN: Right.

DR. WAGNER: -- is what I'm saying.

DR. GUTMANN: So -- yeah. I like the idea of making the recommendation even more focused, but -- still using this, but -- I know that we have three parts, deliberation, education, and bringing education and deliberation together, but I think it would be wrong to artificially leave out the fact, and it is a fact, that in order to address bioethical challenges at all levels, you're going to have to make the teaching engaging --

DR. WAGNER: Uh-huh.

DR. GUTMANN: -- so -- and the way to make it engaging, and it's in here, but it's not explicit, is to bring to life -- and this is what I was going to say to Dan's -- just to underline Dan's point. How do you bring it to life? Well, what I said in the Gay lecture at Harvard, the title of the gay lecture was "Why Should We Care About Bioethics," and the short answer is even if you don't care about bioethics, bioethics cares about you, and that means you're affected by it. It's both a public good and a private good.

DR. WAGNER: Uh-huh. Uh-huh. Uh-huh.

DR. GUTMANN: And once you show people that it affects you, so why should you listen and learn going to a pediatrician? Because the pediatrician is there to care for you and the only way the pediatrician can care for you is if she hears from you and the only way you can benefit from it is if you listen to her and, you know, so I think we might be able to make -- we can say what we say in the first rec -- but then make it a more -- a fulsome recommendation about how engaging --

DR. WAGNER: Uh-huh.

DR. GUTMANN: -- students, no matter -- in issues that have ethical, you know, content is really the way to go.

DR. WAGNER: I agree.

DR. SULMASY: At both a policy level and a personal level.

DR. GUTMANN: And a personal level. I mean, I think that's why I said even if bioethics, you're not interested, it's interested --

DR. SULMASY: Right.

DR. GUTMANN: -- in you.

DR. SULMASY: Right.

DR. WAGNER: Anita? And then we'll go --

DR. ALLEN: And just to take this one step further, you know, there are an awful lot of sick children out there and these kids need to know how to think about issues like vaccines and flu shots and chemotherapy and psychiatric drugs and these are very hard issues and they're beyond the -- actually beyond the ken of many small children who have to face them.   But I do think we want, as part of the bioethics education, to make it possible for children who are developing their character, who are developing the capacity to reason to -- to the extent possible -- be part not just of the process of

reporting, say, to a pediatrician how one feels, or listening, but also understand that there are decisions that have to be made.

The decisions are complicated. There's no clear right and wrong sometimes. Sometimes Mom and Dad don't even know quite what to do, but yet the children's lives and bodies are at stake. So I would love to have us somehow address this difficult set of issues.

And then maybe on a more immediate level, just routine health decisions about should I have soda and sweets and pizza and French fries and so forth, nutrition-type decisions which kids can be engaged by. So the bioethics of self-care are very important.

I think that one thing we might want to think about is how can we recommend engaging children to the extent of their moral development capacities to be part of not just the reporting and the listening, but the deciding.

DR. GUTMANN: Exactly.

DR. GRADY: I think this builds on that. I was picking up on the wonderful question that Kaitlyn asked us earlier, and I think that it would be very helpful in discussing a recommendation for broad-based ethics education at every level to recognize some of the things that we talked about before, that no topic is off-limits, but that there is -- there are ground rules and strategies for how you introduce things.

And then a really important issue, and I think it goes through not only the preschool and elementary school but even in the professional schools, is remembering that it's not just the controversial issues but it's the everyday ethics that's so critical for people to think about, talk about, learn about. And so the educations should focus on those as well. And I think we should say it explicitly.

DR. WAGNER: I like that very much. I also made a little note here, as I heard you speaking, that isn't one of the outcomes here to build confidence in people's ability to have these conversations, and young people especially? And I wonder if a phrase like that doesn't belong.

There's one last phrase in this, and then we can move on to the others, and of course if you have other comments. We slip in this line that we want educational tools -- and I'm quoting now, if we use this kind of language – "that focus on building moral character." And, by the way, I'm very glad that that's in there.

Are we going to say anything more about that? Because that also tends to be a lightning rod that could actually -- take the focus away from what we're trying to say when we're trying to say something very, very rich there.

DR. GUTMANN: [speaks without mic]

I'm sorry. This is the first recommendation. And the language that I introduced it with was --

DR. GUTMANN: The appropriate grade level that --

DR. WAGNER: -- the appropriate grade level that focuses on building moral character and ethical reasoning skills. Do we give any guidance there or do you just say, somebody else ought to figure out what that means?

DR. GUTMANN: I think Dan should speak to this because he's written about it. But it's virtues – it's cultivating virtues consistently with cultivating the ability to reason. And so I wouldn't shy away from using the language as long as we explain it, but I'd love Dan to explain it a little bit for everybody.

DR. SULMASY: I think part of how -- one of the primary ways in which virtue ethics is taught is through emulation of paradigmatic figures, of mentors. And so that's

one of the ways in which that is done. So people learn virtues, typically, by imitating

people and by practicing and enacting them under supervision.

So I think that that's part of what one should do so that, for instance, teachers

have to model how it is that one engages in these sorts of discussions in order to help to

inculcate a virtue of respectful listening to others who disagree.

Second, I think this all goes back to the point I made earlier about recognizing

the role of other social institutions in the building of character. And I think it's another

reason that might help to mitigate the worries that you seem to be suggesting would be

in here if we do suggest that it's not solely the role of schools, but that other institutions

have a very important role that we have to name in the development of character.

DR. WAGNER: I agree. I just want to make sure we touch that for the record

and we have some clarification in there. And you're right. It argues for expanding the

word beyond schools to include other social institutions.

And let me go to Nita and then back to Christine.

DR. FARAHANY: So we have a Masters of Bioethics and Science Policy at

Duke, and I host a director's workshop as part of that and meet with the students once a

month to say, basically, how's it going? What are you not getting in your classes?

What do you feel like is problematic? How can it be a better educational system for

you?

And one of the things that I've heard pretty consistently is despite the fact that

this is bioethics education, despite the fact that these are great professors who are

teaching them, that many times they feel like when they have a less popular view,

particularly a conservative view, that that view is not well expanded upon, well

respected, well engaged with, and well cultivated.

And so as I look at the wording that you've proposed here and think about the development of moral character and virtue, I wonder how you do that in a way that teaches students how to think rather than what to think, how you develop moral character and virtue in a way that enables them to understand that there are basic ideas of what that means but that ultimately, being moral and cultivating virtue isn't a particular outcome, but a particular way of thinking and reflecting and guiding oneself in life and others, because even with colleagues who I hold in the greatest esteem, I hear that students aren't getting that kind of space to be able to develop their views.

So given that you've really thought a lot about the development of and the teaching of virtues, how do we do it in a way, and how do we offer guidance in this report, that ensures it's how to think rather than what to think?

DR. SULMASY: Yes. I think, again, virtues cannot be divorced from a narrative historical, from embedded, thick communities. Right? But on the other hand, there is substantial overlap. And part of what we're looking at in much of this is the overlap in a morally diverse community. What sort of public virtues are important even when we disagree?

And among those, respectfulness is the virtue that corresponds to the verb "to respect." Right? So those kinds of ways of thinking about it. And yes, being very cautious to say that it is not teaching, particularly in the schools, although the other social institutions might do that, that within that schools, as a public space -- at least the public schools -- that there would be an emphasis on teaching the virtues that are conducive to this sort of respectful dialogue among persons, and that that's important to note.

DR. GUTMANN: One of the things we could do is enumerate the virtues that

correspond to the principles that we outline. So public beneficence and responsible

stewardship is caring for others, including others who are yet unborn, future

generations.

Intellectual freedom and responsibility corresponds to respect for others' views,

even when you don't agree with them. And the responsibility is actually a responsibility

to articulate your own views and accept that they may or may not be agreed.

So we could actually – so those aren't a comprehensive set of virtues. But they

are the virtues that correspond to our principles. And then there's intellectual freedom

and responsibility. Also honesty, talk about a basic virtue from the beginning.

So I think these are very -- they're as important as they are basic, and they are

ignored at our peril. And I think schools need for sure to teach them, but we also should

say, while we cannot interfere in the workings of a family because families have

freedom, it's clear that families have the largest effect on the education of children.

That doesn't mean that schools aren't very responsible, including responsible for

trying to do what families don't do. But it would be hopeless without the family

involved.

DR. SULMASY: So things that approximate even cardinal virtues, at least if you

look at somebody like MacIntyre, just honesty, courage, and justice being three

important virtues that cut across communities, may be instantiated in different ways in

particular communities, but also have a common space in a democratic polity.

DR. WAGNER: Dan, I like this idea of blending what you and Amy have been

talking about. It would be fascinating to see one of our grey sidebars that we put in our

reports that talks about how this commission has been dealing with these virtues all

along, ever since the very first report, tying these principles, as you say, into justice and

fairness and caring, going into stewardship.

It would be very interesting to show where we might find these four-- three to five, whatever they are -- just broad umbrella things that have really driven this commission all along -- we're not making this up new -- putting them in a sidebar, but then calling them out, calling those four out here. And the sidebar would describe where they came from and link them in to where we've been.

Christine, I've got you next on the list.

DR. GRADY: I've been thinking that there's a way in which this set of recommendations is so big that it's almost hard to get your arms around. And now it just got bigger to me.

We're saying, we want programs that teach people in schools and families and religious communities to be good people and have good reasoning skills. Okay. That's hard to argue with. Right? It's hard to know what the recommendation is really saying, then.

I think part of what I was thinking is that maybe in a similar way as we did with the deliberation discussion we had earlier, maybe we should have some concrete examples, programs that we think exemplify this idea that are doable, that people have been able to do as examples of, this is not a pie-in-the-sky kind of idea. This is a real need and can be accomplished.

DR. GUTMANN: Could I offer a friendly amendment to that? Because I really like it. I think we're not in the position of offering programs that will scale up to all schools. That's a big job, and there are multiple kinds of programs.

But we are in the business of offering examples that any program could incorporate. That's why I used the example of teaching children the virtues and skills

that have to do with needing medical care or being a doctor in our society.

If we give good examples of that that could be incorporated in any program, I think we're doing what we can and should do. I've written about education and the structure of education. But we can't redesign the Common Core. And even if we did, that would only be part of the structure of education in our society.

What we can do from a bioethics perspective -- and I think we should keep that perspective -- is offer examples in each one of these recommendations, so starting with the first, which would allow and urge educators at all levels to build the foundation of a good bioethics education, from preschool to, in this case -- okay?

DR. WAGNER: Let me suggest we move to the next one and maybe there'll be less conversation. I don't know. But this second one, to remind you, is -- I don't know. Maybe it's all cumulative and so maybe we need less and less as we go alone.

The second one, I remind you, is a strong recommendation that graduate and professional education -- medicine, law, business are called out as specific examples, but I assume this would mean public health and other -- nursing, et cetera -- should include a strong bioethics component to help graduates understand and address the distinct ethical challenges that might arise in the practice of their chosen field.

To me this would resonate with what Laura Bishop was saying, that this should be embedded in a curriculum of each of these. Do we want to incorporate her language there? And Nita's got a comment.

DR. FARAHANY: I do. I have two comments on this one. One is as a law professor, when I see the legal field, I get excited but also concerned. And the concern is the word bioethics as opposed to ethics here.

So the language that you proposed, "Educators at the graduate and professional

level, including the medical, public health, engineering, and legal fields, should develop, integrate, and emphasize bioethics education." There are different ethics that matter to each of these fields. It's not always bioethics, which can be a narrower focus.

And so I wonder if it's really -- emphasize ethics education. Bioethics when it's relevant, but it's ethics education more generally that we are concerned about. This is a separate issue to me than what comes a little bit later, which is, "Cultivate a culture of responsibility."

So that is a wonderful idea and a really important idea, but it's almost like a footnote in this recommendation right now. So I think NSF right now has a call for proposals out that is due in the next couple of months about people undertaking a project in STEM education to figure out how to cultivate a culture of responsibility, with the understanding that what are the institutional incentives and the broader community incentives that are necessary to cultivate a culture of responsibility, particularly in a time when the number of scientific retractions are on the rise, when there are incentives that may be leading people to falsification of data and over-hyping of the significance of their research, et cetera.

So I'm going to suggest we cabin this "Cultivate a culture of responsibility," and that that may be a bigger issue than something to drop inside of this, a separate recommendation.

DR. GUTMANN: That might be a separate recommendation, actually. I like that.

DR. FARAHANY: Which is to do some -- so just in the same way that the NSF is investing in figuring out what are the obstacles to a culture of responsibility, and what are the necessary preconditions to help develop a better culture of responsibility, I think

we should wholeheartedly support that call for proposals and greater research into what we can do to better incentive a culture of responsibility.

But that ties in to the first part, which is, the culture of responsibility in each of these different professions, while they have certain virtues that are similar to the virtues that you've outlined, they're not all bioethics, right? There's a common theme underneath them about cultivating responsible professional ethics within each of these that may be different.

DR. WAGNER: Dan?

DR. SULMASY: Along those lines, I think, as Amy had suggested before, we really do, I think, want as a bioethics commission to focus on bioethics. And I think that the inclusion of other professions like law and engineering was meant to only focus on the overlap between those issues.

Because, while it's a good thing, I don't think it's our responsibility to comment on all of legal ethics, for instance; but to the extent that questions of bioethics come up in patent law and tort law, whatever it might be, that that's where the focus should be.

So whatever we need to do to wordsmith at least this recommendation to make sure that when we're talking about these other professions, it's about the bioethical issues within them rather than all of engineering ethics or all of legal ethics.

DR. FARAHANY: Could I just respond to that? I completely agree that our charge is to focus on bioethics. I think, then, what we're talking about is a meaning shift in this recommendation, which is probably just wordsmithing because that's probably what we were trying to get at.

But the idea that every one of these fields needs bioethics education is probably not right. The idea that to the extent that bioethics intersects with each of these fields,

we need to bring the principles of bioethics and education of bioethics to bear, is right. It's just going to look very different in something like law than it is going to in medicine.

DR. GUTMANN: Yes. So I think, and I'm not going to wordsmith it here, but I am going to try to summarize.

I think what we want to say in the second recommendation is what we intended to say, but we need to say it clearly, is that it is important that all the relevant professions -- and almost all the professions are relevant although if we're going to list, medicine, law, and business is a strange trio. You would put engineering in there.

But in any case, I think what we want to say is that there ought to be a bioethics component to the applied ethics --

DR. WAGNER: Of the respective field.

DR. GUTMANN: -- of the field. And that means there ought to be applied ethics, and there ought to be a bioethics component of the applied ethics. And I think we should use the term "applied ethics," not just "ethics," because at this level what is needed is an understanding of how ethics applies to the fields.

So we can wordsmith it, but I think it is about having some component of bioethics. But it's within the larger -- that there has to be applied ethics. You wouldn't just scoop down in law and just do bioethics. Or, for that matter, in engineering, some of the ethics won't be bioethics.

DR. WAGNER: No, they're not. No, they're not.

DR. GUTMANN: Yes.

DR. ALLEN: I'd like to lobby, Amy, to keep business in there.

DR. GUTMANN: Oh, I didn't mean to take it out.

DR. WAGNER: Oh, sure. Oh, sure.

DR. GUTMANN: Oh, no, no.

DR. ALLEN: I want both industry and about corporate responsibility and --

DR. GUTMANN: Got it. I wasn't taking it out. I was just saying if you have business in there, you certainly should have engineering in there.

DR. WAGNER: Oh, no, there's a long list. Social work we haven't talked about that have their own professional schools. All profession schools, nursing --

DR. GUTMANN: Yes. And it does say in this version, which is not the final version, it says, "Including in." So it's technically correct. It just struck me as strange to have that trio without engineering in there, given that we began with synthetic biology.

DR. WAGNER: Let's move, given the time.

DR. GUTMANN: Yes. Yes.

DR. WAGNER: And the next one -- I have a hard time making this one controversial. The next one is voicing our support for teacher training and professional development in this area.

Any a -- yes. All in favor say aye.

DR. GUTMANN: Yes. No, and obviously we're going to have to again be specific about -- given that there is teacher training and given that deliberative ways of teaching are effective, and ethics is -- there are great case studies here, provide teachers both -- we said this earlier -- with teaching modules and training in them.

DR. WAGNER: Yes. Absolutely.

DR. FARAHANY: And it would be nice just to recognize the modules that our staff has been creating here to talk about that, both as a resource but as a potential model

for output of some other bioethics-based organizations, that as they create reports, to be able to similarly create educational -- that this would fulfill and help advance this mission, make their research and make their work more accessible by creating modules that will be accessible.

DR. WAGNER: As we have been a good model for that.

DR. FARAHANY: Yes.

DR. WAGNER: Yes. That's great. That's great.

The last one in this I don't think is controversial. I just think it's difficult. And that's developing effective metrics to evaluate ethics education. So anyhow, what does success look like in the end?

DR. GUTMANN: Let me just say I agree with this in theory, which means, since I'm a purist, I agree with it. But I worry about what it conveys in practice. We don't measure very much of the effectiveness of education now, and to single out measuring bioethics education, which all too often is done, suggests that bioethics education -- just suggests; it implies, it doesn't say it -- is more controversial, less fundamental, than history education or math education.

I mean, we don't measure a lot of education. And so how to say this in a way that I would say it should be evaluated as other forms of education are evaluated, and with the same relevant standards of evaluating it?

Because it's not that I don't want to evaluate it. We do, and we call for evaluating it. But I don't want to suggest that it is in more need of evaluation than any other form of education. So how do you evaluate history education, for example, which all schools teach? I was taught American history. I was taught New York State history. How do you evaluate that?

So one of the things I would say about ethics education is, one of the ways of evaluating any education is forget about the outcomes. Would you want a person to grow up in our society, whether in their role as a family member, in their role as a citizen, without being taught ethics?

And the answer to that is obviously no, and so we have to teach it. And then I think the recommendation is that since we have to teach it, let's find the most effective ways of teaching it and try to figure out how to evaluate that; whereas this sounds like we're just evaluating whether we should have it or not.

It would be really barbaric not to have an education in the kinds of ethics we're talking about -- evidence-based reasoning, honesty, care for others, respect for others. So I think we do need to reword this, but not retreat from it.

DR. WAGNER: Nita?

DR. FARAHANY: I took the spirit of this recommendation to be slightly different because I agree with what you're saying, which is we don't want to single out a bioethics education when we're already not evaluating other education, which we should be doing, but it's very difficult to do.

So what I took the spirit of this to be was that you're not testing for a right answer at the end of the day. You're testing for particular types of skills that bioethics education can impart. And so the way to judge whether or not bioethics education is effective is by measuring whether or not there is an improvement in those skills.

I think a different way to frame this, then, would be to say that the goal of ethics education is not to reach any particular outcome, that a good way to define what is an effective program is one that clearly articulates what the types of skills and virtues are that you're trying to cultivate, and ensuring that the curriculum advances the teaching of

those particular types of skills and virtues.

Because when we talk about some of the supporting text for this, it's about good judgment and measuring through surveys whether or not people have gained logical and moral reasoning skills, which is to say at the outset and when you are later reflecting upon your program, you should ensure that it is satisfying a particular set of goals, not that people have learned specific -- what to think, but particular methodologies for thinking.

And so I think setting up what the guideposts are for effective education is in this domain is a good thing for us to impart, not that we are asking for a particular type of evaluation to occur for this area, unlike other areas.

DR. WAGNER: Raju?

DR. KUCHERLAPATI: I think what we're trying to say here is that there are certain kinds of things that we could measure, like we could find out whether people know how to add two plus two and what it means. And there's a test that you can do to administer it.

There are other types of things, such as bioethics, where you cannot use such a test to evaluate it. But it ought to be possible for us to be able to ask the questions. What is the impact of this education on the society as a whole?

And I don't know what the metric is. But it is absolutely appropriate for us to ask that and be able to show, if we can show it. And that's the reason why this recommendation says that we should support research to try to develop those metrics to do that, and to be able to say 10 years from now or 20 years from now, to say, as a result of the implementation of this program, that our society is better than what we started out with.

DR. GUTMANN: Let me just say that it's hard. It's more complicated than that because the two plus two isn't a good analogy. History education is a good analogy. How do you show that an education in history makes our society better?

The causality is just -- the causal links are just -- by the way, it isn't all that easy to show that math education makes our society better. It's easy to show that people succeed on math tests.

But history is the better example because it would be equally -- it's important to teach history and teach it well. And it's important to teach ethics and teach it well. And the question is, how do you judge whether it's being taught well?

Obviously, that has to do with learning because you want to figure out people's learning. And there are certain metrics. And in both cases, but I'll pick out ethics, it's how well students can reason about certain things, and it's also how well they develop certain habits, like listening to others, offering their views honestly, and so on. And those, by inference, are better for our society. But you actually couldn't show the huge link to our society is better in some testable ways because of that.

What you can show -- and maybe, Raju, you're pointing to this -- so our founding fathers famously said, and multiples of them said, that a democracy can only flourish with an educated public. And they very much believed in character education and education in reasoning as well.

And there are correlations between a very well-educated citizenry and the flourishing of societies. But there's no causal link between a certain kind of ethics education or history education or, for that matter, some science education. That's a bridge too far.

DR. KUCHERLAPATI: Maybe one of the arguments that we make, and I don't

need to tell many of you, that we consider that our American system of liberal arts

education is very good.

DR. GUTMANN: Yes. Yes.

DR. KUCHERLAPATI: And the reason why is the diversity of things that we

teach students. And one of the most important things that we say that we teach is to

reason.

DR. GUTMANN: Yes. And ethics reasoning is part of that.

DR. KUCHERLAPATI: And we can make an argument in this case and say, to

provide that reasoning, this is an additional tool to do that.

DR. GUTMANN: It's an essential part of it. Right.

DR. KUCHERLAPATI: Right. How to make such an essential part of that.

And therefore, it would have value.

DR. GUTMANN: Yes. Yes.

DR. KUCHERLAPATI: And if we could say that, that's also good.

DR. GUTMANN: Yes. And I think we can say that and we should say that.

And that goes to Nita's that we can't measure so much the outcome as the process and

the importance of the process in a liberal arts and science -- a broad education.

DR. GRADY: It seems to me there are two reasons that measuring things are

important in education.

One is that -- and some of you have been saying this -- but the way I think about

it is in order to justify doing it, it has to be shown that you achieve your goals by doing

it. So in other words, by offering education, you achieve the goals, which requires first

figuring out what the goals are and then saying, does this achieve them?

The second thing is that education comes in different qualities. Some is better

than others. It's all education, but it's not -- and maybe they're connected. The poorer

quality education doesn't achieve the goals, but it certainly -- you can teach the same

thing in a variety of different ways. And so we need to have metrics or ways of

measuring the quality as well.

DR. GUTMANN: Let's be careful about the word metrics.

DR. GRADY: Yes. I don't like the word metrics.

DR. GUTMANN: Because you have to ask, are you willing to get rid of history

education in our schools because it is extremely difficult to measure its success on a

test? I mean, you can measure on a test whether students know names, dates, facts, and

so on, and those are important.

It's very hard to measure how history education -- measure on a test --

DR. GRADY: Sure.

DR. GUTMANN: -- and this goes to the Common Core, but I think measuring

how literate students are in being able to reason about history and reason about ethics is

something that's important. And I'd just like us to make sure we use the appropriate --

DR. GRADY: Words.

DR. GUTMANN: Yes.

DR. WAGNER: Why don't we modify that word? Why don't we modify that

word, then? Because what we're really talking about in this recommendation is not

necessarily developing effective metrics, but developing effective assessment to

determine --

DR. GUTMANN: Assessment.

DR. WAGNER: -- the effectiveness of ethics education. Is that better?

DR. GUTMANN: Yes.

DR. SULMASY: Yes. I very much agree with that, for two reasons.

One is Amy suggested earlier that there's almost a sense, when one is demanding patient-level outcome measures for the success of ethics, that that claim is not made of biochemistry education, or there's a sense that this has got to prove itself to be valuable before we will put it into the curriculum. And I think that that's wrong.

And then second, the kinds of measures that are used for this might not be surveys, for instance. When I first got to New York Medical College, I had carte blanche to start this education program for the medical students. And I gave them -- four-sentence answers to 10 questions was going to be the test. I had students paging me the night before, panicked that they had never taken an essay test. Four sentences is an essay.

But there's this obsession with measurement in the narrow sense that is implied by a word like metrics, and I think that we have to recognize that for ethics, there may be other measures that are used for evaluating both the performance of the students and overall effectiveness of a particular program.

There's a place for some of those things. I've done some surveys of knowledge. I've done some surveys of confidence, how one perceives self-efficacy in dealing with ethical questions. But it's not the whole game, and that's important.

DR. GUTMANN: Having said that, I agree with everything that's said. I don't want to retreat from the idea that we want to be able to assess how well ethics education cultivates moral reasoning and skills. And we can do that.

And one of the ways you do it is asking students to write brief defenses of the positions they most disagree with and what their response would be and evaluating them. And you do it before and after. I've done it in my course. And it's striking how

poor students are at the beginning of being taught this, and how much they can develop

those skills, which are absolutely essential. So we're not retreating from it. We just

want to --

DR. WAGNER: There are many examples. Raju, you brought up the

fundamentals of liberal arts education. And when one goes back to those original

concepts, we've dropped some of them -- the trivium, quadrivium, that coupling

between rhetoric and didactic, which is really the root.

The only remnant of that on our -- I shouldn't say the only remnant -- a clear

remnant of that on our campus would be our debate team, where regardless of what you

believe, I may ask you to argue a position and you may have the misfortune of having to

argue a position that is counter to what you believe. It forces you to listen.

DR. GUTMANN: Yes. And a lot of debate for and against are ethical issues, by

the way.

DR. WAGNER: Exactly so. So there are mechanisms to do this and to assess

people's abilities with those skills.

DR. GUTMANN: Yes.

DR. WAGNER: And I think that exists on all of our campuses. But I could

imagine how it could exist more broadly and be applied here.

Other thoughts on this one? I think we're converging, actually.

DR. GUTMANN: Steve has something.

DR. WAGNER: Oh, sorry, Steve.

DR. HAUSER: I very much like the way that Raju separated the ethics

education with the ethical behavior that's the goal, the true goal, of the ethics education.

And I think that's obviously much harder to measure. It's aspirational.

DR. GUTMANN: Yes. Right.

DR. HAUSER: But highlighting that distinction that you raise to me is important.

DR. KUCHERLAPATI: I guess I am also saying something a little bit more. Whatever the profession is, right, anyone of us, whether we have MDs or PhDs or some other degrees, somehow we were said to be qualified to do what we're doing.

And so that meant that there was some measure by which people would be able to say that Raju is qualified to be a geneticist. And so it may not be possible in the case of ethics to have such a measure. If that is the reason, then we could say, let's find out if there are methods, or let's do research to find out such methods.

Another extreme that I hear is that there is an intrinsic problem with testing, and testing is bad, and they do not achieve the kinds of goals that we want to issue. And I am trying to make a distinction between those two.

DR. GUTMANN: Yes. I don't think anyone would say it's bad. I think it's limited.

DR. WAGNER: It has limits.

DR. GUTMANN: So I would just say to the first, which I agree with, that people get professionally accredited, if you will. And I would say apropos of bioethics education that we ought to be sure that those accreditations include ethics education because all professions are justified by the way they serve society, and the basic ethics of professions, especially the ones represented around this table, have to include some understanding and ability to have the virtues and the skills of ethical as well as scientific reasoning.

And I go back. They ought to be assessed in parallel with the other assessments.

So we're not backing away. But the way that they can be best assessed varies. How do we assess how well doctors treat their patients? It's very different the way we assess the ability of doctors to, if they're surgeons, operate on people, or if they're researchers, to understand the intricacies of neuroscience at the cutting edge.

But all of those are part of what we require of -- and ought to require of -- professionals, and they have to be assessed in different ways appropriate to their -- that's all. I just think that that's -- and we do evaluate doctors now as for how -- their patient care, and we teach them -- and that's part of bioethics teaching. And I'm very proud of medical schools, that they do it more than they did it in the past.

DR. WAGNER: Christine and Dan, and I think that's going to wrap up this part.

DR. GRADY: So just a couple of concurrent activities that are going on that raise some of these similar issues. There's been an effort -- a request -- at the NIH to start to think about how to measure the impact of bioethics research.

And so one of the Association of Directors of Bioethics Programs took this on as a task, to try to figure out how you would measure it. And what they first realized is that you needed to be very explicit about what the goals are, and that that took a whole long list of effort to figure that.

The other is the American Society of Bioethics in the Humanities is working on a method for accrediting -- or not accrediting, I guess call it -- figuring out the qualities of people who do clinical ethics consultation and how to assess those.

It's a very difficult task because some of them are skills, but that need to be observed, not just talked about. So there's a lot of really interesting issues going on right now in terms of how to assess different things in the world of bioethics.

But I want to emphasize one thing that Amy said earlier. And I think one of the

things we should actually say somehow is that there's no reason that bioethics should be held to a different standard than any other field.

Everything needs to be evaluated in terms of how well it works to do what it's supposed to be doing. But there's nothing about bioethics that needs more evaluation or more scrutiny than other things.

DR. GUTMANN: And just on the testing, since we talked about it earlier and there is a push for more testing in our society and a concern of teaching to the test. And this gets much more to early -- up through 12th grade and is very relevant to how well we teach everybody, including the students who are most at risk.

When you teach to the test, you can get good test results that fade almost immediately after the test. What we're talking about in ethics education is an education along the lines of what we care about in educating people to be good professionals as well as good people, a lasting education.

And we have to make sure that some of the effects of the education are going to be -- they may not be testable in the short run. They may take longer to test. So I just think there are some caveats here. And I say this all in full support of the recommendation that we evaluate.

DR. WAGNER: Dan, last word on this, and then --

DR. SULMASY: No. As others have said, ethics is one subject in teaching a medical student or a scientist, right? And there would have to be methods of evaluating that the person has competence in all of the fields that are necessary to complete that degree. So that should be done.

For ethics, at least from the standpoint of medical students that I teach, we can test their knowledge. That can be done, that they know what a living will is, for

instance. We can test their reasoning skills. It's probably better done by essays, right, and evaluated that way.

DR. GUTMANN: Yes.

DR. SULMASY: For evaluating programs, you can test things like perceived self-efficacy or confidence in the ability to carry out certain activities. You can do what are called OSCEs, that you can see whether they have the skills, actually, to do these with simulated patients or something like that.

But then ultimately there is, always standardly, an evaluation of their behavior, which is really looking more at character. It's usually not done well -- and this is part of the strength of this recommendation, is do better on all of these kinds of evaluations.

But humanism and professionalism is one category on every single clinical rotation that a medical student is on. And we don't do a good job of evaluating that -- can do better. And we have to do better, I think, at making sure, when someone is not meeting standards, that we really call them on that.

And so asking for better assessments can cover all of those sorts of things in at least medicine, but I'm sure in other fields as well.

DR. GUTMANN: So I'll give you an example, a real example, that happened that just shows how basic ethics education, if taken to heart, not just to mind but to heart, can help in the most advanced medical practices.

So a very excellent surgeon was confronted with a patient who was given two pieces of advice on two different surgeries, options. And she asked him, why should I choose this one that you recommended over the other one that another surgeon recommended? And his answer, and I quote, was, "Because I said so."

And you can't know for sure if that doctor had gone through education that said

you should give reasons out of respect for the patient. But what you know is that we owe it to patients to make sure that even the best surgeons learn that giving reasons is part of respecting people.

That did not happen to me, but it happened to someone I know really well. And she came back and she said, "Can you believe it?"

DR. ALLEN: Did she ask the other surgeon?

DR. GUTMANN: No. She got reasons before she did it. But she wasn't going to do it without some reasons for doing one or another. And it's just good -- Raju asked for negative examples before.

That's just such a – and, if this weren't real, I wouldn't have given it to you because you'd think, "Oh, it's just made up." But this is a real, terrific surgeon who's extraordinarily smart, and yet that's the answer he gave.

DR. WAGNER: I hate to cut you off but you're digging into your next session.